

ORDER

DEPARTMENT OF TRANSPORTATION FEDERAL AVIATION ADMINISTRATION

6980.5 A

11/18/75

SUBJ: ENGINE GENERATOR TRANSFER PROCEDURES FOR ANTICIPATED POWER FAILURE

1. PURPOSE. To provide **instructions** for the operation of emergency engine generators during local storm activity.
2. DISTRIBUTION. This order is distributed to division level in the Airway Facilities and **Air** Traffic Services in Washington headquarters and to the regional Air Traffic and Airway Facilities divisions; to branch level in the overseas Air Traffic and Airway Facilities area offices; to all Airway Facilities sectors; and to all Air Route Traffic Control Centers; Airport Traffic Control Towers, and combined stations/towers.
3. BACKGROUND. Power outages, interruptions of service, or abnormal voltage fluctuations are often due to local storm **activity**. **Usually**, information on the location and severity of storms is available within the operating area of the facility. When a severe storm is approaching the vicinity, the probability of facility outage because of power failure can be reduced by placing the facility load **on** engine generator power or, alternately, to have the engine generator operating on the **loadbank** prior to the arrival of the storm.
4. CANCELLATION. This order supersedes and cancels Order **6980.5** dated **1/19/68**, Engine Generator Transfer Procedures for Anticipated Power Failures.
5. ACTION. Air Traffic and/or Airway Facilities maintenance personnel shall monitor weather reports and radar to determine when severe storm activity is approaching a facility. At least **30** minutes prior to the estimated arrival of a severe storm in the area of a facility, maintenance personnel will start standby engine generators at **ARTCCS**, **ARSR** sites, and other facilities **as** deemed necessary. After coordination with Air Traffic Control on the facility concerned, maintenance personnel shall take action in accordance with either paragraph **5a** or **5b** below. This requirement does not apply to facilities where maintenance personnel are not on duty at the time action is required or to the **ARTCC** after acceptance of the power conditioning system (PCS).
 - a. Place the facility on engine generator power until storm activity has cleared the area.
 - b. Place the engine generator on the **loadbank** until the storm activity has cleared the local area. This procedure will only be used where the **loadbank** will be automatically disconnected from the engine

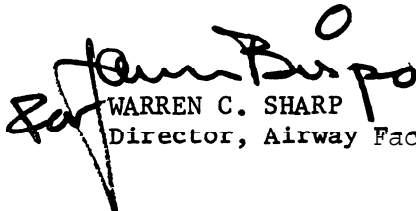
Distribution: WAF/AT-2; RMAT/AF-2; FAT-1, 2, 3, (Minimum)
FAF-2/3 (Normal)

Initiated By: AAF-530

11/18/75

generator upon failure of commercial power. Only one engine generator will be started and placed on the **loadbank** at **ARTCC** facilities,

6. RESULTS. At an **ATC** facility, transfer from commercial power to an operating engine generator, either manually or from the loadbank, will be made in less than two seconds, instead of the usual fifteen to twenty seconds required if the engine is not operating.
- a. The engine generators will be at operating temperatures, with the voltage and frequency stabilized for optimum operating conditions.
 - b. Engine generators at **ARTCC** and **ARSR** facilities are equipped with load dropping relays which will automatically drop the **loadbank** and pick up the facility load when the commercial power fails, thus causing only a momentary interruption of facility power.
 - c. The weekly, monthly, or quarterly test runs of the engine generators may be discontinued where sufficient runs of comparable duration are performed through use of the above procedures.


WARREN C. SHARP
Director, Airway Facilities Service